March 17, 2021

Leslie@budrevics.com



March 11, 2021

Attention: Ms. Leslie Kiela

**ALEXANDER BUDREVICS + ASSOCIATES LTD.** 

Landscape Architects 895 Don Mills Road, Second Tower, Suite 212 Toronto, Ontario M3C 1W3 T. 416.444.5201

Re: 12035 Dixie Road – Caledon - Arborist Report and Tree Preservation Plan

Ms. Kiela,

As per your request, I have completed a site visit to 12035 Dixie Road - Caledon, in preparation for an arborist report and tree preservation with regards to the proposed development.

The enclosed report inventories all trees > 10cm DBH located on and within 6.0m of the subject site. This inventory will include individual tag #s for individual trees with both common and botanical names, DBH, condition and recommendations. Additionally, it will determine if any regulated trees are to be negatively impacted by construction.

Two hundred and fifty-eight (258) trees have been inventoried as part of this project, thirty of which are Town owned. All Town owned trees conflict with proposed construction/sidewalk and are to be removed. Additionally, twenty-seven trees located on the subject site conflict with proposed construction and are to be removed. Authorization from the Town of Caledon is required prior to the removal of these fifty-seven trees.

I trust this report meets your needs, if you have any questions or concerns feel free to contact me at cgavin@canopyconsulting.ca.

Regards,

Cletus Gavin B.Sc. Earth Science & Biology

President & Consulting Arborist ASCA Registered Consulting Arborist #613 ISA Certified Arborist (ON-1576A) Butternut Health Assessor # 439 TRAO Certified



**Arborist Report** Tree Protection Plan

12035 Dixie Road Caledon, ON

# Prepared for:

Attention: Ms. Leslie Kiela ALEXANDER BUDREVICS + ASSOCIATES LTD.

Landscape Architects 895 Don Mills Road, Second Tower, Suite 212 Toronto, Ontario M3C 1W3 T. 416.444.5201 leslie@budrevics.com

# Prepared By:

Cletus Gavin, B. Sc Earth Science & Biology

ISA Certified Arborist (ON-1576A) **Canopy Consulting** 1019B College Street Toronto ON M6H 1A8 416-300-2957

cgavin@canopyconsulting.ca

March 11, 2021

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## **INTRODUCTION:**

I have been commissioned by Ms. Leslie Kiela of Alexander Budrevics & Associates, to complete an arborist report and tree protection plan for the proposed development located at 12035 Road - Caledon. The report will identify all trees on and within 6.0m of the work area, provide a preservation strategy with recommendations (if possible) and a tree protection plan depicting the tree's locations, the existing conditions, and any proposed work. All field work and data collection were completed by Cletus Gavin, RCA #613 on December 16, 2020.

#### **HISTORY AND ASSIGNMENT:**

Ms. Kiela has provided a site plan illustrating the existing conditions and the proposed development as per the Tree Protection Plan – TPP-1 in Appendix I. Upon the request of the client or municipality, *Canopy Consulting*, can be further retained beyond the current scope of work to provide on-site monitoring services and to provide any remedial actions deemed necessary.

# Scope of work:

- 1. Inventory all trees >10cm located on and within 6m of the work area. The inventory will include a tag #, species, DBH, condition, comments, and recommendations.
- 2. Determine if any regulated trees are to be negatively impacted by the proposed development.
- 3. Provide a preservation strategy for all trees recommended for preservation.

# **ASSUMPTION AND LIMITING CONDITIONS:**

- 1. Care has been taken to obtain all information from reliable sources. *Canopy Consulting* can neither guarantee nor be responsible for the accuracy of information provided by others.
- 2. This report may not be used for any expressed purpose other than its intended purpose and alteration of any part of this report invalidates the report. Excerpts or alterations to the report, without the authorization of the author or his company invalidates its intent and/or implied conclusions.
- 3. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection was made using accepted arboricultural practices and is limited to visual examination of accessible items without climbing, dissection, probing or coring and detailed root examination involving excavation. While reasonable efforts have been made to assess trees outlined in this report, there is no warranty or guarantee, expressed or implied, that problems or deficiencies with the tree(s) or any part(s) of them may not arise in the future. All trees should be inspected and re-assessed periodically.
- 4. The determination of ownership of any subject tree(s) is the responsibility of the owner and any civil or common-law issues, which may exist between property owners with respect to trees, must be resolved by the owner. A recommendation to remove or maintain tree(s) does not grant authority to encroach in any manner onto adjacent private properties.

# TREE SURVEY AND RECOMMENDATIONS:

See TPP-1 plan in Appendix I for tree location, Table #1 for species identification, condition, and recommendations and Appendix II for corresponding Digital Images.

Table #1: 12035 Dixie Road - Caledon

Tree #	Species Common Name ( <i>Biological Name</i> )	D <sup>1</sup> B H (cm)	Condition <sup>2</sup>	Category <sup>3</sup>	Comments	Recommendation <sup>4</sup>	M <sup>5</sup> T P Z (M)
422	Honey Locust Gleditsia triacanthos	20	F	1	- deadwood, storm break - in conflict with proposed construction	R	
423	Honey Locust Gleditsia triacanthos	22	F	1	- deadwood, storm break, in decline - in conflict with proposed construction	R	
424	Honey Locust Gleditsia triacanthos	31	F	1	- deadwood, storm breaks - in conflict with proposed construction	R	
425	Honey Locust Gleditsia triacanthos	24	F	1	- deadwood - in conflict with proposed construction	R	
426	Honey Locust Gleditsia triacanthos	29	F	1	- deadwood, storm break - in conflict with proposed construction	R	
427	Honey Locust Gleditsia triacanthos	25	F	1	- deadwood, storm break - in conflict with proposed construction	R	
428	Honey Locust Gleditsia triacanthos	26	F	1	- deadwood, storm break - in conflict with proposed construction	R	
429	Honey Locust Gleditsia triacanthos	27	F	1	- deadwood, storm break - in conflict with proposed construction	R	
430	Honey Locust Gleditsia triacanthos	23	F	1	- deadwood, storm break - in conflict with proposed construction	R	
431	Honey Locust Gleditsia triacanthos	26	F	1	- deadwood, storm break - in conflict with proposed construction	R	
432	Honey Locust Gleditsia triacanthos	24	F	1	- deadwood, storm break - in conflict with proposed construction	R	
433	Honey Locust Gleditsia triacanthos	26	F	1	- deadwood, storm break - in conflict with proposed construction	R	

<sup>&</sup>lt;sup>1</sup> **DBH:** Diameter at Breast Height is a measurement in centimeters, using a caliper tape, of the tree stem at 1.37 meters above existing grade.

<sup>&</sup>lt;sup>2</sup> **Condition:** A rating of **H**azardous/**D**ead/**P**oor/**F**air/**G**ood/**E**xcellent was determined for each tree by visually assessing all the above ground components of the tree, using acceptable arboricultural procedures as recommended in the "Guide for Plant Appraisal", prepared under contract by the "Council of Tree & Landscape Appraisers (CTLA), an official publication of the International Society of Arboriculture (I.S.A.), 9<sup>th</sup> Edition, 2000".

<sup>&</sup>lt;sup>3</sup> Category #:

<sup>1.</sup> Trees with diameters of 10 cm or more, situated on private property on the subject site.

<sup>2.</sup> Trees with diameters of 10 cm or more, situated on private property, within 6 m of the subject site.

<sup>3.</sup> Trees of all diameters situated on Town owned parkland within 6 m of the subject site.

<sup>4.</sup> Trees of all diameters situated within the Municipal road allowance adjacent to the subject site.

<sup>&</sup>lt;sup>4</sup> **Recommendation**: Preserve (**P**), Preserve with Injury (**PI**), Remove (**R**), Transplant (**T**)

<sup>&</sup>lt;sup>5</sup> MTPZ: Minimum tree protection zone distance as mandated by Canopy Consulting.

Tree #	Species Common Name ( <i>Biological Name</i> )	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
434	Willow Salix spp.	27	F	1	- deadwood, poor form, in decline - clear of proposed work - shall retain its prescribed TPZ	P	1.8
435	Norway Maple Acer platanoides	12	F	1	- deadwood, in decline, vines - clear of proposed work - shall retain its prescribed TPZ	P	1.8
436	Mountain Ash <i>Sorbus spp</i> .	12	F	1	- deadwood, in decline, vines - clear of proposed work - shall retain its prescribed TPZ	P	1.8
437	Apple <i>Malus spp</i> .	13	F	1	- deadwood, in decline, vines, poor form - clear of proposed work - shall retain its prescribed TPZ	P	1.8
438	Apple <i>Malus spp</i> .	12	P	1	<ul><li>deadwood, in decline, vines</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
439	Mountain Ash <i>Sorbus spp</i> .	22	P	1	- deadwood, in decline, vines - clear of proposed work - shall retain its prescribed TPZ	P	1.8
440	Black Cherry Prunus serotina	15	F	1	- deadwood, vines - clear of proposed work - shall retain its prescribed TPZ	P	1.8
441	Black Cherry Prunus serotina	14	F	1	<ul><li>deadwood, vines, in decline</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
442	Manitoba Maple  Acer negundo	47	P	1	- 70% dead, vines - clear of proposed work - shall retain its prescribed TPZ	P	3.0
443	White Elm <i>Ulmus americana</i>	33	F	1	<ul> <li>deadwood, lean, poor form, in decline</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	2.4
444	Apple <i>Malus spp</i> .	22	F	1	- deadwood, poor union with included bark - clear of proposed work - shall retain its prescribed TPZ	P	1.8
445	Manitoba Maple  Acer negundo	83	F	1	<ul><li>large deadwood, in decline, cavity in trunk</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	5.4
446	Black Cherry Prunus serotina	16	F	1	- deadwood, in decline, severe lean - clear of proposed work - shall retain its prescribed TPZ	P	1.8
447	Hawthorn Crataegus spp.	15	F	1	- deadwood, in decline, poor union - clear of proposed work - shall retain its prescribed TPZ	P	1.8
448	Manitoba Maple  Acer negundo	13	F	1	- poor form and union - clear of proposed work - shall retain its prescribed TPZ	P	1.8
449	Manitoba Maple  Acer negundo	21	F	1	- poor form and union, deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
450	Manitoba Maple  Acer negundo	15	F	1	- deadwood, in decline - clear of proposed work - shall retain its prescribed TPZ	P	1.8
451	Manitoba Maple <i>Acer negundo</i>	27	F	1	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
452	Manitoba Maple  Acer negundo	18	F	1	- poor form and union, deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
453	Manitoba Maple  Acer negundo	22	F	1	- poor form - clear of proposed work - shall retain its prescribed TPZ	P	1.8

Tree #	Species Common Name ( <i>Biological Name</i> )	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
454	Manitoba Maple  Acer negundo	19	F	1	- poor form, deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
455	Manitoba Maple  Acer negundo	25	F	1	- lean, deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
456	Manitoba Maple <i>Acer negundo</i>	17	F	1	- poor form, lean, deadwood  - clear of proposed work  - shall retain its prescribed TPZ	P	1.8
457	Manitoba Maple <i>Acer negundo</i>	54	F	1	<ul> <li>poor form and union, deadwood, multiple large storm breaks</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	1.8
458	Black Walnut Juglans nigra	12	F	1	<ul><li>vines</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
459	Black Walnut  Juglans nigra	26	F	1	- vines, deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
460	Manitoba Maple  Acer negundo	52	P	1	- multiple failures, deadwood, in decline - clear of proposed work - shall retain its prescribed TPZ	P	1.8
461	Manitoba Maple  Acer negundo	22	F	1	<ul><li>over creek</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
462	Manitoba Maple  Acer negundo	32	F	1	- deadwood, poor form - clear of proposed work - shall retain its prescribed TPZ	P	2.4
463	Manitoba Maple <i>Acer negundo</i>	42	P	1	- multiple failures - clear of proposed work - shall retain its prescribed TPZ	P	3.0
464	Black Walnut  Juglans nigra	12	F	1	- vines, storm break - clear of proposed work - shall retain its prescribed TPZ	P	1.8
465	Manitoba Maple <i>Acer negundo</i>	30	P	1	- multiple failures - clear of proposed work - shall retain its prescribed TPZ	P	2.4
466	Apple <i>Malus spp</i> .	55	P	1	- multiple failures - clear of proposed work - shall retain its prescribed TPZ	P	3.6
467	Apple <i>Malus spp.</i> (5)	12- 25	F	1	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
468	White Elm Ulmus americana	13	F	1	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
469	Apple <i>Malus spp.</i> (3)	12- 25	F	1	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
470	White Elm Ulmus americana	17	F	1	- deadwood, in decline, poor union - clear of proposed work - shall retain its prescribed TPZ	P	1.8
471	Manitoba Maple <i>Acer negundo</i>	17	F	1	- poor form, deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
472	Manitoba Maple  Acer negundo	45	P	1	<ul> <li>poor form in decline, storm break</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	3.0

Tree #	Species Common Name ( <i>Biological Name</i> )	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
473	Apple Malus spp. (3)	12- 25	F	1	<ul><li>deadwood</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
474	Manitoba Maple <i>Acer negundo</i>	19	F	1	<ul><li>poor form, deadwood, in decline</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
475	Manitoba Maple <i>Acer negundo</i>	22	F	1	<ul><li>poor union, deadwood</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
476	Manitoba Maple <i>Acer negundo</i>	26	F	1	<ul> <li>poor union with included bark, deadwood</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	1.8
477	Manitoba Maple Acer negundo	76	F	1	<ul> <li>poor form and union, in decline, multiple storm breaks, deadwood</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	4.8
478	Apple <i>Malus spp</i> .	45	P	1	<ul><li>40% dead</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	3.0
479	Manitoba Maple <i>Acer negundo</i>	39	F	1	<ul> <li>poor form and union, deadwood</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	2.4
480	Manitoba Maple  Acer negundo  (9)	23- 49	P	1	<ul><li>in decline, large deadwood</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	3.0
481	Black Walnut  Juglans nigra	12	G	1	- clear of proposed work - shall retain its prescribed TPZ	P	1.8
482	White Elm <i>Ulmus americana</i>	70	F	1	<ul><li>deadwood, storm break</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	4.8
483	Sugar Maple Acer saccharum	35	F	1	<ul> <li>poor union with included bark, deadwood</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	2.4
484	Manitoba Maple  Acer negundo	23	F	1	<ul> <li>storm break vines, deadwood</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	1.8
485	Little Leaf Linden Tilia cordata	36	F	1	<ul> <li>deadwood, dual stem, in decline, vines</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	2.4
486	Manitoba Maple <i>Acer negundo</i>	24	F	1	<ul><li>lean, deadwood</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
487	Manitoba Maple Acer negundo	32	F	1	<ul> <li>poor form and union, deadwood</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	2.4
488	Apple <i>Malus spp</i> .	22	P	1	<ul><li>poor form, in decline, vines</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
489	Little Leaf Linden Tilia cordata	48	F	1	<ul> <li>deadwood, multi-stem, poor form, in decline, vines</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	3.0
490	Manitoba Maple <i>Acer negundo</i>	59	P	1	<ul><li>- trunk fail</li><li>- clear of proposed work</li><li>- shall retain its prescribed TPZ</li></ul>	P	3.6
491	Little Leaf Linden Tilia cordata	26	F	1	<ul><li>deadwood, storm break</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	3.0

Tree #	Species Common Name ( <i>Biological Name</i> )	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
492	White Elm <i>Ulmus americana</i>	32	F	1	- deadwood, storm break, in decline - in conflict with proposed construction	R	
493	Manitoba Maple  Acer negundo	32	D	1	<ul><li>- 100% dead</li><li>- clear of proposed work</li><li>- shall retain its prescribed TPZ</li></ul>	R	
494	White Elm Ulmus americana	26	F	1	- deadwood, in decline - in conflict with proposed construction	R	
495	White Elm <i>Ulmus americana</i>	24	F	1	- deadwood, in decline - in conflict with proposed construction	R	
496	Willow Salix spp.	28	F	1	- deadwood, poor union - in conflict with proposed construction	R	
497	Willow Salix spp.	27	F	1	- deadwood, poor form, multi-stem - in conflict with proposed construction	R	
498	Manitoba Maple <i>Acer negundo</i>	25	F	1	- deadwood, poor union with included bark - in conflict with proposed construction	R	
499	Red Oak <i>Quercus rubra</i>	34	G	1	- in conflict with proposed construction	R	
500	Manitoba Maple <i>Acer negundo</i>	19	F	1	- deadwood - in conflict with proposed construction	R	
501	Willow Salix spp.	17	F	1	- deadwood, poor union - in conflict with proposed construction	R	
502	Manitoba Maple <i>Acer negundo</i>	16	F	1	- deadwood, poor union and form - in conflict with proposed construction	R	
503	Manitoba Maple <i>Acer negundo</i>	18	F	1	- deadwood, poor union - in conflict with proposed construction	R	
504	Manitoba Maple <i>Acer negundo</i>	12	F	1	- deadwood, in decline - in conflict with proposed construction	R	
A	Norway Maple Acer platanoides	27	P	1	- 60% dead - in conflict with proposed construction	R	
В	Norway Maple Acer platanoides	15	P	1	- deadwood, poor union - in conflict with proposed construction	R	
C1	Hawthorn Crataegus spp. (5)	<10	F	4	- vines, deadwood - in conflict with proposed construction	R	
C2	Amur Maple Acer ginnala (5)	<12	F	4	- in conflict with proposed construction	R	
СЗ	Amur Maple Acer ginnala (5)	<10	F	4	- in conflict with proposed construction	R	
C4	Amur Maple Acer ginnala (5)	<13	F	4	- in conflict with proposed construction	R	

Tree #	Species Common Name ( <i>Biological Name</i> )	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
C5	Amur Maple Acer ginnala (5)	<10	F	4	- in conflict with proposed construction	R	
С6	Amur Maple Acer ginnala (5)	<10	F	4	- in conflict with proposed construction	R	
N1	Norway Maple Acer platanoides	36	F	2	<ul><li>deadwood, storm break</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	2.4
N2	Norway Maple Acer platanoides	34	G	2	<ul><li>poor union</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	2.4
N3	Norway Maple Acer platanoides	31	F	2	<ul><li>deadwood</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	2.4
N4	White Spruce Picea glauca (3)	14- 16	F	2	<ul><li>- clear of proposed work</li><li>- shall retain its prescribed TPZ</li></ul>	P	1.8
N5	White Spruce <i>Picea glauca</i>	12	F	2	<ul><li>deadwood</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
N6	Silver Maple Acer saccharinum	40	F	2	<ul><li>deadwood, storm break</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	3.0
N7	Willow Salix spp.	28	F	2	<ul><li>deadwood</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
N8	Willow Salix spp.	48	F	2	<ul><li>deadwood, storm break</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
N9	White Elm <i>Ulmus americana</i>	37	F	2	<ul><li>deadwood, storm break</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	2.4
N10	Manitoba Maple <i>Acer negundo</i>	31	F	2	<ul><li>deadwood, poor form and union</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	2.4
N11	Manitoba Maple Acer negundo	58	F	2	<ul> <li>deadwood, poor form and union</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	3.6
N12	Hawthorn <i>Crataegus spp.</i>	12	F	2	<ul><li>- deadwood</li><li>- clear of proposed work</li><li>- shall retain its prescribed TPZ</li></ul>	P	1.8
N13	Black Walnut Juglans nigra	16	F	2	<ul><li>deadwood, unbalanced</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
N14	Black Walnut Juglans nigra	11	P	2	<ul><li>50% dead</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
N15	Hawthorn <i>Crataegus spp.</i>	47	F	2	<ul><li>storm break, in decline, poor form</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	3.0
N16	White Elm <i>Ulmus americana</i>	41	F	2	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	3.0
N17	Little Leaf Linden Tilia cordata	28	F	2	<ul> <li>deadwood, in decline, vines</li> <li>clear of proposed work</li> <li>shall retain its prescribed TPZ</li> </ul>	P	1.8

Tree #	Species Common Name ( <i>Biological Name</i> )	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
N18	Norway Maple Acer platanoides	59	F	2	- deadwood, storm break, poor union - clear of proposed work - shall retain its prescribed TPZ	P	3.6
N19	Red Oak <i>Quercus rubra</i>	15	F	2	- deadwood, unbalanced - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N20	Black Walnut Juglans nigra	16	G	2	- clear of proposed work - shall retain its prescribed TPZ	P	1.8
N21	Little Leaf Linden Tilia cordata	24	F	2	<ul><li>deadwood, in decline, vines</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	1.8
N22	Black Walnut  Juglans nigra	15	F	2	- clear of proposed work - shall retain its prescribed TPZ	P	1.8
N23	White Elm Ulmus americana	21	F	2	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N24	Little Leaf Linden Tilia cordata	28	F	2	- deadwood, in decline, vines - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N25	White Spruce Picea glauca (83)	16- 35	F	2	- clear of proposed work - shall retain its prescribed TPZ	P	2.4
N26	White Spruce <i>Picea glauca</i>	27	P	2	- 60% dead - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N27	White Spruce Picea glauca	32	D	2	- 100% dead - clear of proposed work - shall retain its prescribed TPZ	P	2.4
N28	White Spruce Picea glauca	24	P	2	- 25% dead, in decline - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N29	White Spruce Picea glauca	28	D	2	- 100% dead - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N30	White Spruce Picea glauca	31	P	2	- 20% dead, in decline, poor shoot growth - clear of proposed work - shall retain its prescribed TPZ	P	2.4
N31	Manitoba Maple  Acer negundo	51	P	2	- fail on fence - clear of proposed work - shall retain its prescribed TPZ	P	3.6
N32	White Oak <i>Quercus alba</i>	32	F	2	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	2.4
N33	White Spruce Picea glauca	42	D	2	- 100% dead - clear of proposed work - shall retain its prescribed TPZ	P	3.0
N34	Apple <i>Malus spp</i> .	28	F	2	- deadwood, poor union with included bark - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N35	White Spruce Picea glauca	36	F	2	- deadwood - clear of proposed work - shall retain its prescribed TPZ	P	2.4
N36	White Spruce Picea glauca	27	D	2	- 100% dead - clear of proposed work - shall retain its prescribed TPZ	P	1.8
N37	Willow Salix spp.	34	F	2	- deadwood, storm break, dual stem - clear of proposed work - shall retain its prescribed TPZ	P	2.4

Tree #	Species Common Name ( <i>Biological Name</i> )	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
N38	White Oak <i>Quercus alba</i>	27	F	2	<ul><li>deadwood, in decline</li><li>clear of proposed work</li><li>shall retain its prescribed TPZ</li></ul>	P	2.4

## **Discussion:**

## Town Owned Trees:

1. As listed above, there are two hundred and fifty-eight (258) trees involved with this project, thirty of which are located within the Town road allowance, being trees no. C1-C6 (trees no. C1-C6 are groups containing 5 individual trees each). All thirty trees are in conflict with proposed construction/sidewalk and are to be removed. Authorization from the Town is required prior to the removal of these thirty trees.

# Privately Owned Trees Located within 6.0m of the Subject Site:

1. There are one hundred and twenty-seven (127) trees located on private property within 6.0m of the subject site being Trees no. N1-N38 (Trees no. N4, N15 and N25 are groups containing 3, 6 and 83 individual trees respectively). All one hundred and twenty-seven trees are clear of the proposed development, shall retain their prescribed TPZs and as such, will not be disturbed during construction.

# Privately Owned Trees Located on the Subject Site:

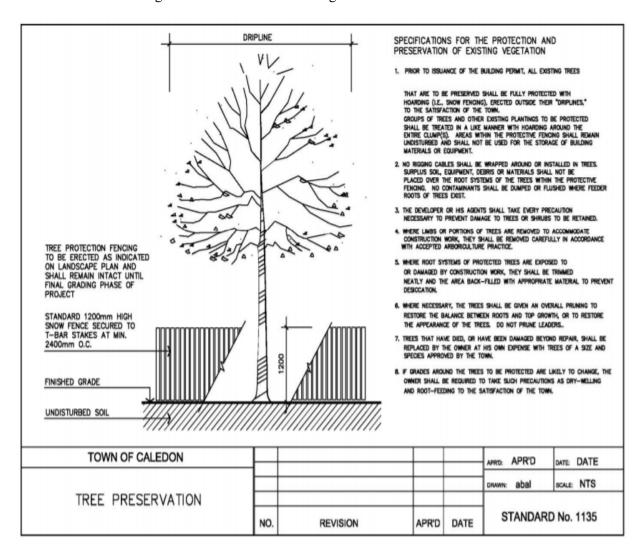
- 1. There are one hundred and one (101) trees located on the subject site, being trees no. 422-504, A and B (Trees no. 467, 469, 473 and 480 are groups containing 5, 3, 3 and 9 individual trees respectively). Trees no. 434-491 are clear of the proposed development, shall retain their prescribed TPZs and as such, will not be disturbed during construction.
- 2. Trees no. 422-433, 492-504, A and B are in conflict with the proposed development and as such are to be removed. Authorization from the Town is required prior to the removal of these twenty-seven trees.

To further protect each tree scheduled for preservation from the potential of construction disturbance, it is recommended that the below listed tree preservation recommendations are implemented.

## ESTABLISH TREE PROTECTION ZONE

The purpose of the tree protection zone (TPZ) is to prevent root damage, soil compaction and soil contamination. Workers and machinery shall not disturb the tree protection zone in any way. To prevent access, the following is required:

- 1.1 Install hoarding as per attached Tree Protection Plan in Appendix I.
- 1.2 Hoarding shall consist of the following:



- 1.3 No fill, equipment or supplies are to be stored within the tree protection zone.
- 1.4 Activities, which are likely to injure or destroy tree(s), are not permitted within the TPZ.
- 1.5 No objects may be attached to tree(s) within the TPZ.
- 1.6 Tree protection barriers are to be erected prior to the commencement of any construction or grading activities on the site and are to remain in place in good condition throughout the entire duration of the project.
- 1.7 Once all tree/site protection measures have been installed, you must notify Urban Forestry staff to arrange for an inspection of the site and approval of the site protection requirements.
- 1.8 No Hoarding shall be removed until all construction activity is complete.
- 1.9 A sign that is like the illustration below must be mounted on all sides of a tree protection barrier for the duration of the project. The sign should be a minimum of 40cm X 60cm and made of white gator board, laminates, or equivalent material.

## TREE PROTECTION ZONE (TPZ)

No grade change, storage of materials or equipment is permitted within the TPZ. The tree protection barrier must not be removed without the authorization from the Town.

#### 2.0 ROOT PRUNING

Where possible, hand dig areas closest to each tree to prevent any unnecessary tearing or pulling of roots. Removal of roots that are greater than 2.5 centimetres in diameter or roots that are injured or diseased should be performed as follows:

- 2.1 Preserve the root bark ridge (similar in structure to the branch bark ridge). Directional Root Pruning (DRP) is the recommended technique and should be used during hand excavation around tree roots. Roots are like branches in their response to pruning practices. With DRP, objectionable and severely injured roots are properly cut to a lateral root that is growing downward or in a favorable direction.
- 2.2 All roots needing to be pruned or removed shall be cut cleanly with sharp hand tools, by a Certified Arborist or by the PCA.
- 2.3 No wound dressings\pruning paint shall be used to cover the ends of each cut.

- 2.4 All roots requiring pruning shall be cut using any of the following tools:
  - Large or small loppers
  - Hand pruners
  - Small hand saws
  - Wound scribers
- 2.5 Avoid prolonged exposure of tree roots during construction keep exposed roots moist and dampened with mulching materials, irrigation or wrap in burlap if exposed for longer than 4 hours.

#### a. LANDSCAPING

Any landscaping completed within the tree preservation zones, after construction is completed and hoarding has been removed, cannot cause damage to any of the trees or their roots. The trees must be protected for the same reasons listed above but without using hoarding.

- 4.1 **No grade changes** are permitted which include adding and/or removing soil.
- 4.2 **No excavation** is permitted that can cause damage to the roots of the tree.
- 4.3 **No heavy equipment** can be used to compact the soil within the tree preservation zone.
- 4.4 Any hard -surface sidewalks, paths, etc. should be constructed using permeable products such as interlocking stone, etc.

# **SUMMARY TABLE:**

Tree Category  1 (Tree located on the subject site)	Total	Preserve 74	Preserve with Injury	Remove 27	Transplant 0
2 (Tree located within 6m of the subject site)	127	127	0	0	0
4 (Town owned tree)	30	0	0	30	0
Total	258	201	0	57	0

## **CONCLUSIONS:**

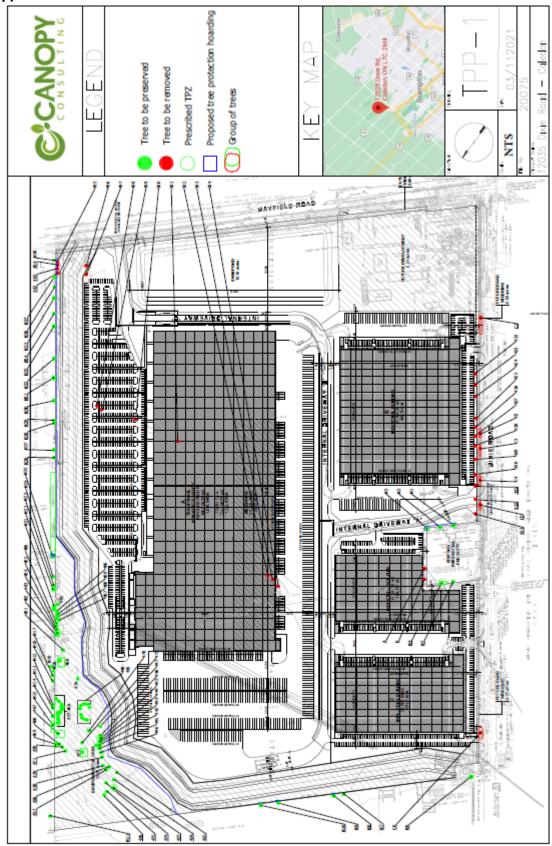
As listed in the Summary Table above, two hundred and fifty-eight (258) trees have been inventoried as part of this project, thirty of which are Town owned. All Town owned trees conflict with proposed construction and are to be removed. Additionally, twenty-seven trees located on the subject site conflict with proposed construction and are to be removed. Authorization from the Town of Caledon is required prior to the removal of these fifty-seven trees. Finally, with the above in mind, it is the consultant's opinion that if the above tree preservation recommendations are implemented, proposed construction will not adversely affect the long-term health, safety and/or existing condition of all trees scheduled for preservation.

Sincerely,

Cletus Gavin B.Sc. Earth Science & Biology

President & Consulting Arborist ASCA Registered Consulting Arborist #613 ISA Certified Arborist (ON-1576A) Butternut Health Assessor # 439 TRAQ Certified

**Appendix I: Tree Protection Plan – TPP-1** 



# **Appendix II: Digital Images**



Photo #1: Trees no422-430 and C2-C3 looking southwest.



Photo #2: Trees no. 434-437, 474-471 and N11 looking northeast.



Photo #3: Trees no. 457-471 looking northwest.



Photo #4: Trees no. A, B, N4, N5 and non-regulated trees looking east.